66345-036-7

Serial No. 10/541,210 Amendment dated May 21, 2007

Reply to Office Action of Dec. 19,2006

IN THE SPECIFICATION:

Page 1, line 5, insert the following topic headings:

BACKGROUND OF THE INVENTION

FIELD OF THE INVENTION

The present invention relates to a photosensitive dispersion with adjustable viscosity for depositing metal on an insulating substrate and

Page 1, line 8, insert the following topic heading:

THE PRIOR ART

use thereof.

The patent EP 0 687 311 of the applicant concerns a polymeric resin with adjustable viscosity and pH for depositing catalytic palladium on a substrate, comprising, in combination, a palladium salt, a sequestering agent of the chloride or carboxylic acid type, a polymer containing hydroxyl and/or carboxyl groups soluble in water, a basic compound and a solvent chosen from amongst water, methanol and ethanol, the pH value being between 1 and 10, and to its applications for the deposition of catalytic palladium on the substrate surface and for the metallisation of these surfaces. Although this type of polymeric resin with palladium has proved advantageous in a large number of applications in the metallisation of polymeric substrates and the like, in particular because of its stability over time and the adjustability of its viscosity and pH, it does

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however have a certain number of drawbacks, including the obligatory

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use of palladium, which is a noble metal that is both expensive and whose

price fluctuates greatly on the market, and the obligatory passage

through an autocatalytic (electroless) bath for the metallisation of the

non-conductive substrate and also because of the fact that the

photosensitivity of the resin is reduced to a narrow range of wavelengths

lying between 190 and 300 nm, thus greatly limiting the type of

application that can be envisaged and the radiation source that can be

used in this regard.

Page 2, line 11, insert the following topic heading:

SUMMARY OF THE INVENTION

To this end, according to the invention, the photosensitive dispersion

comprises, in combination, a pigment conferring properties of oxidation-

reduction under light irradiation, a metallic salt, a sequestering agent for

the metallic salt, a liquid film-forming polymeric formulation, a basic

compound, an organic solvent and water.

Page 9, line 23 to page 10, line 14, replace the paragraphs and Table with

the following amended paragraphs and Table.

Example 2

Catalytic paint with copper for the metallisation, selective or not, of a

polymer substrate.

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Composition of the dispersion	Concentration as % by weight
Titanium dioxide as finely divided powder	5 to 25
Dioxane	10 to 30
2-methoxy-1-methylethyl acetate	25 to 40
Mixture of dipropylene glycol methyl ether	1 to 15
isomers	
Disperse-ayd® w33 1)	0.2 to 2
Joncryl® 537 2)	5 to 25
Mixture of tripropylene glycol methyl ether	1 to 5
isomers	
Dapro ® u99 3)	0.25 to 1
Palladium-Copper (II) chloride (metallic salt)	0.05 to 1
Citric Acid (sequestering agent)	0.1 to 1
Ammonia (base)	0.1 to 1
Deionised water	1 to 15

- 1) Dispersing agent manufactured by Elementis: mixture of non-ionic and anionic surface-active agents in water.
- 2) Film-forming acrylic polymeric emulsion, manufactured by Johnson Polymer, registered trade mark.
- 3) Wetting agent manufactured by Daniel Products: silicon-free interface tension modifier.

The same procedure as in Example 1 is followed. The result is the deposition of a catalytic <u>palladium_copper_layer</u>, selective or not. In the case of a selective metallisation, the non-irradiated parts are solubilised in water. A metallic overloading by electroplating is then made possible.